

PPG NOVAGUARD® 5043 Epoxy Resurfacer

Formerly known as ICO Hi Guard SL

DESCRIPTION

Three-component, 100% solids novolac epoxy floor resurfacer

PRINCIPAL CHARACTERISTICS

- Easy to apply, self-leveling
- Low odor
- Resists concentrated acids, caustics and some solvents
- Good resistance to thermal and mechanical shock
- High wear and chemical resistance
- Bonds to dry and damp concrete, wood, metal, tile, terrazzo and existing epoxy and urethane coatings
- Can be mixed with specially graded aggregates to create a slip resistant surface texture
- TYPICAL USES:
- Repair of pitted or lightly damaged concrete floors
- Suitable for areas with heavy traffic
- High corrosion areas
- Chemical plants
- Plating operations
- Paper and pulp mills

COLOR AND GLOSS LEVEL

- Gray, Red, Black
- Gloss

BASIC DATA AT 77°F (25°C)

Data for mixed product	
Number of components	Three
Mass density	10.1 lb/US gal (1.2 kg/l)
Volume solids	99% ± 2%
VOC (Supplied)	EPA Method 24: 0.1 lb/US gal (9.0 g/l)
Recommended dry film thickness	62.5 - 125.0 mils (1587 - 3175 µm) per coat
Theoretical spreading rate	12.5 ft ² /US gal for 125.0 mils (0.3 m ² /l for 3175 µm) 25 ft ² /US gal for 62.5 mils (0.6 m ² /l for 1588 µm)
Dry to touch	16 hours
Dry to walk on	30 hours
Full cure after	7 days
Shelf life	Part A: at least 12 months when stored cool and dry Part B: at least 12 months when stored cool and dry Part C: at least 12 months when stored cool and dry

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Notes:

- Material should be stored in dry conditions, out of direct sunlight, in unopened original factory containers, at temperatures above 50°F (10°C) and below 100°F (38°C)
- Full cure after reflects maximum hardness and chemical resistance at 77°F (25°C)

RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

Concrete

- All surfaces must be sound, clean, free of oil, grease, dirt, mildew, curing compounds, loose and flaking paint, and other foreign substances
- New concrete must cure a minimum of 28 days prior to application of this product
- Prepare in accordance with SSPC SP-13 guidelines
- Concrete pH must be 7.0 or higher
- Cracks 1/8" (3175 µm) wide or greater, pour joints, and construction joints must be cleaned and filled with PPG Joint Fillers or Sealants
- Patch all holes over 1/2" (1.3 cm) deep with PPG Quick Mender X.O. before applying product
- Concrete surfaces must be primed with PPG Flooring™ 912 LV Primer before applying product.

SYSTEM SPECIFICATION

- Expansion joints, control joints, and moving cracks should be filled with appropriate sealant or filler

Chemical Resistances

- 98% sulfuric acid
- 85% phosphoric acid
- 30% chromic
- 20% acetic acid
- 50% sodium hydroxide
- 26% ammonium hydroxide
- Most oils and greases

Notes:

- A more complete list of chemical resistances is available by request from PPG PMC Technical Services.
- To maximize service life, chemical splash and spills should be cleaned promptly

INSTRUCTIONS FOR USE

Mixing Instructions

- Mixing ratio by volume – Part A : Part B = 2.2 : 1
- Mixing ratio by volume – Part C Fill : Mixed A&B = 1 : 1.1
- Product components are pre-packaged in proper ratio
- Mix the three components together in the prescribed ratio using a low speed jiffy-style mixer until uniform color and consistency

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Application

- On concrete surfaces, first apply PPG Flooring 912 LV primer and allow to dry tack free.
- Apply with gauge rake, notched rubber squeegee or steel trowel. Use porcupine roller to help level the floor and for avoiding air entrapment
- Product working time is 75 minutes at 50°F (10°C)
- Product working time is 60 minutes at 77°F (25°C)
- Product working time is 45 minutes at 90°F (32°C)
- Installed at thickness of 1/16" (1587 µm) to 1/8" (3175 µm)
- If a slip-resistant surface is desired, apply a top coat of PPG NOVAGUARD® 5041 and broadcast in silica sand.

Notes:

- Do not apply below 50°F (10°C)
- Do not apply at less than 60 mils (1524 µm) per coat
- Do not apply on a floor sloped > 1/8 in. per ft. (10.4 mm per meter)
- Do not apply in severe thermal shock environment

Pot life

50 minutes at 77°F (25°C)

Note:

- See ADDITIONAL DATA – Pot life

ADDITIONAL DATA

Physical data of cured material	
Characteristic	Value
Tensile Strength (ASTM C307)	2305 psi (15.9 MPa)
Tensile Elongation (ASTM D638)	14%
Compressive strength (ASTM C579)	6940 psi (47.8 MPa)
Flexural Strength (ASTM C580)	3670 psi (25.3 MPa)
Hardness, Shore D (ASTM D2240)	80
Taber Abrasion (ASTM D4060, CS-17 Wheel, 1 kg load, 1,000 cycles)	110 mg loss
Impact Strength	120 in/lb (672.0 cm/kg)
Flammability (ASTM D-635)	Self-extinguishing
Water Absorption (ASTM D570)	0.2% in 24 hours
Coefficient of Thermal Expansion (D696)	1.7x10 ⁻⁵ per °F



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Curing time with standard hardener			
Substrate temperature	Resistant to vehicular service	Dry to walk on	Dry to touch
50°F (10°C)	75 hours	64 hours	30 hours
77°F (25°C)	36 hours	30 hours	16 hours
90°F (32°C)	18 hours	12 hours	8 hours

Pot life (at application viscosity)	
Mixed product temperature	Pot life
50°F (10°C)	60 minutes
77°F (25°C)	50 minutes
90°F (32°C)	25 minutes

DISCLAIMER

- For industrial or professional use only
- This product is specifically suitable for use on the substrates mentioned in this document. For application on any other substrates, please always contact your distributor or PMC representative for specific instructions and in order to make sure that the product performance can be safeguarded.

SAFETY PRECAUTIONS

- Read all label and Safety Data Sheet (SDS) information prior to use

WORLDWIDE AVAILABILITY

It is always the aim of PPG Protective & Marine Coatings to supply the same product on a worldwide basis. However, slight modification of the product is sometimes necessary to comply with local or national rules/circumstances. Under these circumstances an alternative product data sheet is used.

REFERENCES

- Information sheet | Explanation of product data sheets

WARRANTY

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